



The Cognitive Sciences Laboratory
330 Cowper Street, Suite 200, Palo Alto, CA 94301
Voice: 415.327.2007 — Fax: 415.322.7960
e-mail: may@hildegard.saicmp.com

Memorandum

Date: 6 June 1995

To:

From: Edwin C. May, Ph.D. *Em*

Re: Project Evaluation

I welcome the opportunity for an in-depth, comprehensive, and fair evaluation of the project. In anticipation of such a review, I have been examining the issues for years from the perspective of how I would approach the task incorporating what I have learned from the previous extensive evaluations.

In this memorandum, I will describe an efficient, rapid, and comprehensive program review that specifies questions to be answered, evaluation criteria, analysis methodology, and decision thresholds for the continuation of the program.

General Approach

One difficulty with all the previous reviews was that the evaluation questions were not clearly delineated. Typically they were amalgams of sometimes conflicting issues that include the existence of valid phenomena, external threats, and actual or perceived application potential. Each of the domains imply different evaluation methodologies and have vastly different criteria to assess their validity. Within each there may be additional questions that require different and specific evaluation criteria. For example, the criterion to validate the existence of anomalous cognition (i.e., the acquisition, by mental means alone, of information that is secured by distance, time, or shielding) is considerably different from that to validate the existence of anomalous perturbation (i.e., the influence, by mental means alone, of physically isolated and secured matter). In the application domain, the hit-rate criterion for being useful in one arena such as finding hidden or lost objects might be an order of magnitude lower than is required by those who request architectural-level descriptions of remote locations. In addition, these criteria are relatively independent of the quality of the anomalous cognition and generally can only be specified by the product recipient.

Figure 1 shows a schematic representation of the evaluation problem. The evaluation must proceed within the context of the sponsoring agency, in this case from the intelligence perspective. A detailed discussion on the points in Figure 1 follow the schematic.

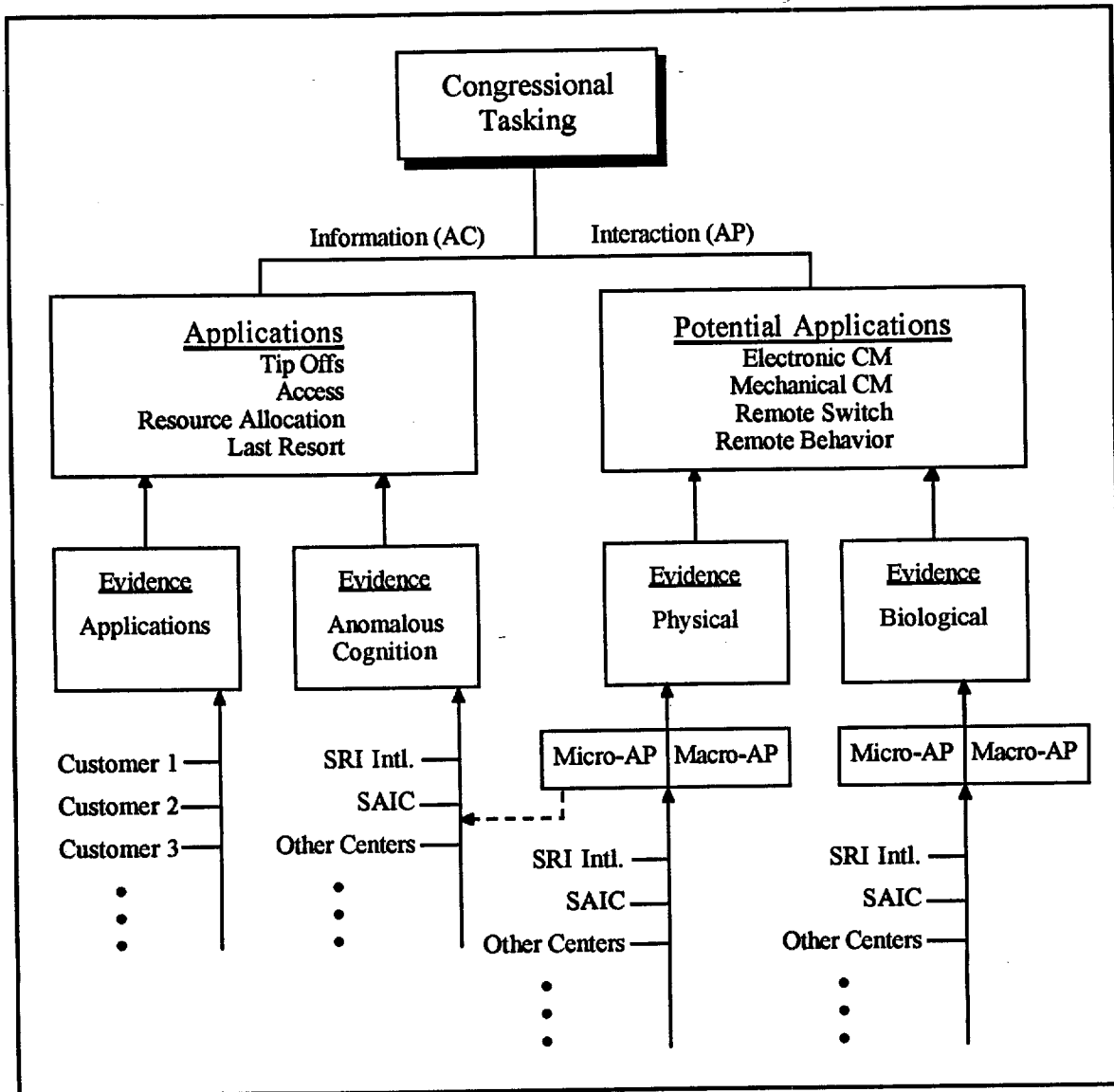


Figure 1. Evaluation Domain

All anomalous mental phenomena can be identified as belonging to two categories:

- **Information Acquisition.** Traditional names for these phenomena include ESP, telepathy, clairvoyance, and precognition. We have adopted the term *anomalous cognition* (AC) because it does not imply a mechanism and is descriptive of the observables.
- **Physical Interaction.** Traditional names for these phenomena include, psychokinesis (PK), materialization and dematerialization, healing, and teleportation. We use the term *anomalous perturbation* (AP).

For research and evaluation, these negative definitions pose a serious problem. That is, AC and AP are what happens when nothing else should. For anomalous cognition, it is relatively straight forward to secure targeted information in an application environment or laboratory experiment from inadvertent leakage to a receiver (i.e., subject, remote viewer, etc.); however, for AP it is very expensive and nearly impossible.

Top-Down Decision

About Applications

Given that a government-sponsored program in anomalous mental phenomena has existed for 20 years, the overriding consideration to continue to include such an activity within the intelligence community must rest primarily upon applications. That is, we must:

- At least show *prima facie* evidence for successful applications in the historical archive, or
- Given that anomalous mental phenomena can be shown to exist, demonstrate that either technically and/or administratively, previous attempts to apply anomalous mental phenomena have been misguided.

If we are unable to show that one or both of these conditions are true, then I would recommend that the intelligence community abandon any further research or applications.*

About Research

The existence of anomalous mental phenomena cannot be statistically determined from the results of a single laboratory. The requirements for a replication of a statistical phenomenon and the methods for the analysis of cross-laboratory results are well developed. The established criteria set by *meta-analysis*, have been met by AC across laboratories and within the government sponsored program.

From the Cognitive Sciences Laboratory's perspective, minimal standards have not been met to claim that large-scale anomalous perturbation exists. Micro-AP (i.e., statistical effects on the output of physical devices such as random number generators) can be interpreted as a manifestation of AC—see the dashed line in Figure 1.

Anomalous perturbation on biological targets is still in question. The research in the Former Soviet Union (FSU) strongly suggests that bio-AP has been successful both on large-scale systems (i.e., the aggression behavior of laboratory animals) and on statistical systems (i.e., brain wave patterns of humans). We have sponsored two studies in the US that support the FSU findings.

Recommend Approach

Current Tasking

In my view, the current approach is unlikely able to answer the primary question: should the intelligence community continue supporting anomalous mental phenomena activity. The reason is, to my knowledge, applications are not being addressed. In addition, by just examining the contractor's archive, we are unable to make a valid statistical assessment with regard to existence of the phenomena. The most that can be learned is an assessment of the quality of the scientific methodology. But since FY 1986, the government has established an on-going Scientific Oversight Committee whose charter was, in part, to assure the sponsors that the best possible science was being used. Thus, by any measure, the high quality of the research has already been established. If the published literature beyond the government sponsored research is considered, then the

* Regardless of existence issues, anomalous mental phenomena might be of intelligence interest if foreign powers are pursuing the area. Foreign assessment will not be discussed further in this memorandum.

case for the existence of some anomalous mental phenomena has already been established according to generally accepted criteria.

A Different Direction

To satisfy the Congressional directive and to determine whether the intelligence community should support the activity, let us conduct a two-day meeting in late June for the Blue Ribbon Panel. The first day should be devoted to the assessment of applications. Such a meeting would be classified at an appropriate level and include a number of customers—both satisfied and not, current and selected previous government officials who are/were responsible for the applications, the program's research director (when appropriate), and selected current/past receivers.

The objective of this meeting is assess the prima facie application evidence first with regard to its utility and second to determine in which domains it has or has not been effective. In addition, the Blue Ribbon Panel may want to assess the management and infrastructure of the application activity.

The second day's unclassified meeting should include selected members of the contractor's Scientific Oversight Committee, other respected members of the scientific community, responsible representatives from the scientific skeptics, representatives from the open research community, and the program's research director.

The agenda for both days should include:

- Establishing acceptance criteria for applications and adopting the standard ones for research.
- Reviewing previous program evaluations, assessing the published meta-analyses, and examining current research efforts.
- Determining if the acceptance criteria have been met in their respective domains.

If the overall program cannot meet these standards, then the sponsor should recommend to Congress to close the activity.

If, however, these criteria are met, then the sponsor should request sufficient funds to adequately continue the applications and research.

The Blue Ribbon Panel's findings and the minutes of the two-day conference should easily satisfy the Congressional directive.

I am confident that with adequate preparation, this two-day meeting is capable of resolving the question of further participation by the intelligence community.